

***State of Washington  
Department of Transportation  
Notice to Consultants  
I-90 Snoqualmie Pass East – Hyak to Keechelus Dam  
General Engineering Consultant***

The Washington State Department of Transportation (WSDOT) solicits interest from consulting firms who would like to provide general engineering consultant (GEC) services working collaboratively with the WSDOT to deliver transportation improvements for the “I-90 Snoqualmie Pass East – Hyak to Keechelus Dam” project. One (1) Negotiated Hourly Rates Agreement will be awarded. WSDOT anticipates the size of the GEC agreement to be in the range of \$10 to \$16 million and the agreement will be for the duration of approximately five years. An effective “I-90 Snoqualmie Pass East – Hyak to Keechelus Dam” project GEC will be crucial to successful, on-time, and on-budget project delivery.

**PROJECT DESCRIPTION**

The “I-90 Snoqualmie Pass East - Hyak to Easton Final Environmental Impact Statement (FEIS)” is under development and nearing completion for the 15.2-mile section of interstate from Hyak (MP 55.1) to Easton (MP 70.3). This FEIS will complete the process of analyzing the social, environmental, and economic impacts associated with addressing the deficient transportation needs within the existing 15.2 mile corridor.

The “I-90 Snoqualmie Pass East – Hyak to Keechelus Dam” project is the first phase within the corridor. Construction of this project will address concerns along I-90 from Hyak to Keechelus Dam within the western end of the corridor (MP 55.1 to MP 59.9). This project will widen approximately five miles of I-90 to six lanes to improve traffic flow and accommodate projected traffic volumes for the next 20 years. Within the project limits, mitigation measures will eliminate or reduce avalanche closures, and hazards due to rockfall. New pavement will replace deteriorated pavement to provide a smoother ride for passenger and freight vehicles. Straighter roadway curves will increase sight distance, drivability and safety. Expanded bridges and culverts will allow safer crossings for wildlife and minimize the risk of wildlife/vehicle collisions. The project will help ensure continued use of I-90 as a primary and competitive freight corridor, promoting the economic vitality of all parts of the state.

The project is intended to:

- **Eliminate or reduce avalanche closures.** Include correction measures which will eliminate the risk of avalanches and associated road closures.
- **Increase capacity.** Widen the highway from four to six lanes. Improve traffic flow and provide additional capacity for future growth.
- **Stabilize slopes.** The project will address highway embankment slopes to eliminate and/or minimize the risk of rock and debris from unstable slopes reaching the roadway.
- **Enhance freight mobility.** Improve freight mobility by providing an additional lane in each direction, lengthen chain-on and off areas, straighten the alignment, and replace rough and deteriorating pavement.
- **Replace pavement.** The cracked and deteriorating pavement will be replaced with new pavement to provide a smoother, more reliable ride.

- **Improve sight distance.** Substandard roadway curves are to be straightened to improve sight distance, drivability, and safety.
- **Address environmental stewardship.** The project is intended to improve ecological connectivity by increasing the size and number of crossing structures and habitat connections throughout the project area. Proposed project is intended to minimize impacts to the environment as much as possible.

The environmental process (NEPA) is well underway for the 15-mile project “I-90 Snoqualmie Pass East”, (which includes the Hyak to Keechelus Dam project). The Draft Environmental Impact Statement (DEIS) was released in June of 2005, public hearings were held in June and July 2005. WSDOT is currently in the process of evaluating and responding to public and agency comments on the DEIS. It is likely that the WSDOT will use GEC support for additional studies, reports, and plans necessary to complete the I-90 Hyak to Easton – Final Environmental Impact Statement (FEIS). The FEIS is a joint National Environmental Policy Act (NEPA) / State Environmental Policy Act (SEPA) document being completed by the WSDOT and Federal Highway Administration (FHWA) as co-lead agencies.

The preferred alternative for this project consists of two decision packages (as described in the DEIS). The first decision selects one of four alignments presented in the DEIS along Keechelus Lake. The second decision selects the level of ecological connectivity at each Connectivity Emphasis Area (CEA) presented in the DEIS. The Inter Disciplinary Team (IDT) for the “I-90 Snoqualmie Pass East” project has recommended “Keechelus Lake Alignment Alternative 4” as the preferred alternative for the lake section of the project. WSDOT and the Federal Highway Administration (FHWA) are currently in the process of considering endorsement of this IDT recommendation. The IDT will begin discussions on recommendations for ecological connectivity in December 2005.

The Final Environmental Impact Statement (FEIS) is expected to be complete in summer of 2007, followed by the Record of Decision (ROD).

## **PROJECT VISION**

- Mission Statement: Deliver the I-90 Snoqualmie Pass East Hyak to Keechelus Dam project on-schedule and on-budget.
- Goals of the Project: Provide a safe and efficient freeway that meets the identified needs and minimizes the construction and travel time delays to the public.
- Near-term objectives:
  1. Complete the I-90 Snoqualmie Pass East NEPA process through the FEIS and the ROD.
  2. Complete engineering design, mitigation and permitting for the I-90 Snoqualmie Pass East Hyak to Keechelus Dam project.
  3. Manage project risks and schedule opportunities to accelerate construction earlier than the current contract advertisement date of 2010.

## **I-90 Snoqualmie Pass East – Hyak to Keechelus Dam Implementation Plan**

Initial funding of \$387.7 million, provided by the 2005 Transportation Partnership Account (TPA), completes the first project (Hyak to Keechelus Dam) of the I-90 Snoqualmie Pass East corridor, which is anticipated to be design / bid / build. The WSDOT / GEC project team will develop and deliver the Plans, Specifications, and Estimate (PS&E) for an ad date of 2010.

Acceleration of this schedule will be evaluated in developing a work plan. Cost estimates and schedules will be developed for the remaining unfunded sections.

### **Project Structure and Staffing**

A proposed table of organization can be found at the following site:

[ftp://ftp.wsdot.wa.gov/incoming/I-90\\_SNOQUALMIE\\_PASS/](ftp://ftp.wsdot.wa.gov/incoming/I-90_SNOQUALMIE_PASS/)

The GEC will be asked to supply a co-location facility and co-locate with the WSDOT staff forming a blended I-90 design team for the duration of the project (approx. 5 years). The GEC will be asked to supply project management functions, geotechnical and structural design (walls) expertise, hydraulic design, and environmental work for the described project. As an option, the GEC will supply management in the areas of engineering, environmental, communications (public outreach), and business management. In addition, the GEC will supply qualified personnel to fill positions as highway designers and technicians, and positions requiring environmental expertise. The GEC will be required to work with WSDOT in the set-up of the IT needs for the co-location office.

The GEC staff expected to co-locate on-site with the WSDOT project team will consist of a project manager, hydraulic engineers, highway designers, technicians, biologists, and environmental planners and technicians. Although geotechnical and structural personnel will not be required to co-locate, this may be advisable during high levels of geotechnical design. Mid-level members of the GEC management team and any necessary administrative support will also be required to co-locate on-site with the project team.

For members of the project team who are not co-located in the project office, in-person meetings will be required on a regular basis.

### **Rules Governing Firewall Issues**

It is planned that this project will be Design-Bid-Build. In the event that this project is changed to Design-Build, the following contracting principles, or "firewalls", have been developed to prevent conflict of interest or unfair project knowledge situations:

1. General Engineering Consultants (GEC) can participate in Segment Preliminary Design (PD) contracts, but not Design-Build (D-B) contracts;
2. GEC sub-consultants can participate in Segment PD contracts and On-Call contracts. GEC sub-consultants may participate in D-B contracts only if their work for the GEC does not provide them project knowledge that could translate to an unfair advantage to their D-B team. For example, cost estimate work or knowledge gained would be grounds for exclusion. Specific on-call tasks or design work in other segments could be acceptable. The burden of proof will be on the GEC sub-consultant to demonstrate that participating in D-B contracts will not create any conflict of interest or unfair project knowledge situations. Further, firewall principle #3 below will apply to the GEC sub-consultants;
3. Preliminary Design Consultants (prime or sub) will not be allowed to participate in a D-B contract for any segment they've done PD work on, but may participate in D-B for other corridor segments;
4. Parent and subsidiary companies participating in GEC Joint Ventures (JV) are precluded from D-B contracts on any segment; and

5. Parent and subsidiary companies participating in PD Joint Ventures are precluded from D-B contracts on any segment they've done PD work on.

The GEC will be with the I-90 Snoqualmie Pass East – Hyak to Keechelus Dam project from start to finish through advertisement and award of a construction contract. The immediate work will assist WSDOT in getting the project going, and may include project management strategies, work plan development, design work, and environmental studies.

The Personal Services and Architect & Engineering On-Call Rosters may be used to supplement the skills and workforce of the integrated I-90 Snoqualmie Pass East – Hyak to Keechelus Dam Team. These agreements will be initially contracted through the State, but may subsequently be managed by the GEC.

## **DESCRIPTION OF WORK**

Supporting documents or appendices referenced in this section of the notice may be found at:

[ftp://ftp.wsdot.wa.gov/incoming/I-90\\_SNOQUALMIE\\_PASS/](ftp://ftp.wsdot.wa.gov/incoming/I-90_SNOQUALMIE_PASS/)

The expected work of the GEC includes both management expertise and technical expertise to deliver the I-90 Snoqualmie Pass East – Hyak to Keechelus Dam Project. The work will include project management inclusive of design and contract preparation, technical and management staff support, environmental documentation and permitting, and possible management of on-call and preliminary design agreements. The GEC will be asked to supply a co-location facility and co-locate with the WSDOT staff forming a blended I-90 design team. The GEC will be asked to supply the geotechnical and structural design work for the described project. The GEC will be looked to as an option to supply the management in the areas of environmental, communications (public outreach) and project business management. In addition, the GEC will supply qualified personnel to fill positions as hydraulic engineers, highway designers, technicians and personal with environmental expertise. The GEC will be required to work with WSDOT in the set-up of the IT needs for the co-location office.

Work performed through the GEC agreement will include:

### **Scope, Schedule, Budget**

The GEC will be asked to assist WSDOT in developing a project work plan that will allow delivery of the project according to the project vision and objectives.

### **Environmental**

In addition, to the NEPA requirements, specific environmental elements such as wildlife connectivity have become a significant part of this project (see DEIS). A unique facet of this project is the current level of support by environmental groups, who are strongly in support of wildlife connectivity, and the improvements included in this project.

Due to the length and complexity of the 15-mile project corridor, the WSDOT project team envisions developing a comprehensive mitigation “package.” The mitigation package will have multiple modules. Development of this mitigation package, along with the FEIS, remains to be done. The following are elements that the GEC will be expected to provide expertise for completion:

- Aquatics Resources Mitigation Plan (e.g., wetlands, fish passage, streams);
- ESA Measures Conservation Plan; and
- Vegetation Salvage/Revegetation Plan.

The following are additional elements that the GEC may be expected to work with WSDOT or other consultant personnel in completing:

- The final EIS;
- Public, agency and stakeholder coordination;
- Ecological Connectivity Crossing structures Plan;
- Property Acquisition for Mitigation Purposes;
- Recreation Resource Mitigation Plan;
- Overall Long-Term Monitoring & Site Management Plan;
- Archeological / Cultural / Historical Mitigation Plan;
- Visual Mitigation;
- Reservoir Storage Loss Mitigation;
- Socio-economic “Mitigation” (e.g., traffic control, emergency response); and
- A full range of Federal, State, and Local Agency permits.

(See discipline reports in appendix of DEIS, also the Final MDT Recommendation Package and Roadside Restoration Plan.) Following completion of the comprehensive mitigation package, and NEPA, the emphasis will turn to obtaining the necessary permits for the construction of the funded I-90 Snoqualmie Pass East – Hyak to Keechelus Dam project. Based upon availability of funding, permitting the unfunded 10-mile remaining portion of the corridor could become a possibility.

WSDOT will be requesting a high level of GEC involvement to complete the above elements of the project. We will be looking for Senior Biologists, Environmental Documentation & Permitting personnel, and Environmental Technicians, to work as project team members in completing the elements described above.

The Hyak to Easton environmental documentation is being prepared by SAIC, Inc. The DEIS was issued in June 2005, and we are currently completing tasks necessary for the issuance of the FEIS (e.g., comment responses, technical amendments). The WSDOT expects that GEC support will be necessary to produce the Final EIS.

### **Geotechnical Exploration, Evaluation, Design**

Geotechnical issues are among the more significant, specialized elements of the project design. The proposed alignment along the lake includes significant areas of fill and extensive retaining walls (standard and non-standard), including work in portions of the lake that are extremely deep, with very steep, rocky slopes. These areas will prove to be challenging to design and construct.

The current design includes a significant number of cut slopes on areas classified as “Unstable Slopes”. These slopes consist of poor quality, fractured rock. An excellent example of the instability of these slopes is the November 2005 rock slide just east of the East Snowshed, which deposited rock onto I-90 early this winter, requiring WSDOT to close two lanes of I-90 for five weeks to stabilize these slopes under an emergency contract. Another area of concern

is the feature named “Slide Curve”. This is probably the single most concentrated area of geotechnical instability. In 1957, during highway construction, a very large slope failure occurred; the slide area can be readily seen today on the northwest face of Slide Curve. Recent geotechnical evaluations (see Geotechnical Reports) prepared for this project confirm the instability and design /construction challenges within this area. Some exploratory borings have already been done (see GEC Design Appendix), in addition to side-scan sonar analysis of the lake bottom.

WSDOT will be requesting extensive GEC expertise in the area of geotechnical and structural design, including recommendations on and possibly providing further exploratory work, analysis, recommendations, wall design, and reports on geotechnical issues such as bridge foundations, embankments and wall types, cut slopes and rockfall mitigation, and providing PS&E for geotechnical elements of the project.

### **Materials**

Material sources, stockpile sites and staging areas are still in the early stages of development, several are included in the GEC Design Appendix. Expertise in construction staging, scheduling, and earthwork balance will be required.

### **Structural Design**

The GEC will provide structural engineering for retaining wall design and PS&E. Design of bridges will be accomplished using WSDOT staff through the WSDOT Bridge and Structures Office. The project team will furnish necessary bridge site data.

### **Hydraulics**

Due to the location of this project, there are many water bodies (mostly streams) that need to be protected from stormwater impacts, caused by both construction and permanent sediments and pollutant loading. The emphasis on minimizing impacts and improving ecological connectivity ties directly into project hydraulics (see related discipline reports in DEIS Appendix CD).

Stormwater management on this project will consist of BMP’s such as biofiltration swales, drainage inlets, detention ponds, and natural or engineered dispersion (see GEC Design Appendix). These elements will be designed in accordance with the Highway Runoff Manual (HRM), and the Hydraulics Manual. All water entering drainage features will be routed either to a BMP feature, or as appropriate, Keechelus Lake. The HRM states that Keechelus Lake is exempt from flow control (water quantity) requirements.

We will be requesting extensive GEC expertise in the area of hydraulics, including analysis, recommendations, and design of all aspects of hydraulics as related to the project. This will include recommendations for any groundwater monitoring device installations needed, the preparation of all reports, development of plan sheets, and providing PS&E for hydrological elements of the project. A significant challenge within the area of hydraulics is addressing stormwater on the large bridges (approx. 1100’) that will be constructed out in the lake

### **Roadway Design**

Widening the roadway to six lanes, improving the roadway alignment with increased design speed, and expanding the chain on/off areas (vicinity of Gold Creek) are among the roadway design objectives for the project (see GEC Design Appendix). In addition to the geological

elements described above, terrain is a significant constraint. Steep rocky terrain on one side and a deep lake on the other are among the challenges of developing an alignment with a standard design speed. Refinements in the current design will include evaluations of areas that currently do not meet a 75 mph design speed. Where possible, revisions will be made to accommodate the 75 mph design speed. In areas where this is not possible, design deviations will be requested for lesser design speeds.

The GEC will be expected to provide designers, experienced in highway design. GEC designers will work alongside WSDOT personnel to develop the roadway design, cost estimates, a design documentation package, a PS&E package, and other design team related elements of the project (see Table of Organization).

### **Traffic**

Intelligent Transportation Systems (ITS) are a lesser part of this project, although there will be significant re-design and replacement of both existing Intelligent Vehicle Highway Systems (IVHS) and new locations through the project. It is anticipated that this work will likely be done through the WSDOT HQ Traffic Office although additional expertise may be required.

### **Right of Way**

The majority of right of way acquisition will be from federal agencies. The US Forest Service and US Bureau of Reclamation manage the majority of federal lands that will need to be acquired by easement. There are a small number of private parcels that will need to be acquired. The project team will develop new right of way plans and assemble a detailed request for submittal to the Forest Service.

### **Utilities**

Although there are minimal to moderate utility impacts within the 10-mile non-funded project, there are very few utility conflicts within the funded I-90 Snoqualmie Pass East – Hyak to Keechelus Dam project, mostly at the extreme west end (beginning) of the project. Additional electrical power will be required for lighting in expanded chain on/off areas, or new or relocated IVHS signing. The project team will identify utility conflicts and necessary relocations. Agreements with affected utilities will be needed.

### **Avalanche Mitigation**

The GEC is expected to provide expertise in evaluating the current design of bridges and other avalanche mitigation features. The GEC will provide expertise for avalanche fence design and PS&E for snow retention elements at locations such as Slide Curve.

### **Constructability – Construction and Traffic Control Staging**

Construction phasing and traffic control is another key part in the development of this project. WSDOT has committed to keeping two lanes of traffic open as much as possible during the construction of this project. (The exception to this will be short-term closures for specific construction activities during non-peak periods.)

WSDOT is expecting to utilize as many “tools” as possible to assure that this project is constructed within budget, and with as little impact as possible to the traveling public. Several of these “tools” are as follows:

- Value Engineering will be utilized to confirm the design and constructability aspects of the project.
- Cost Risk Assessment will be used to assess the risk of construction variables to the budget, and confirm the project cost estimate.
- Early involvement of the construction industry will occur to evaluate the risk of such elements as caisson drilling in deep water on steep rocky slopes, and the impact weather on a mountain pass will have on project working days.
- Development of an “accurate as possible” Construction CPM for the project, with input from the construction industry as well as WSDOT Construction staff.

### **Cost Estimate Analysis (CEA) / Value Engineering (VE)**

Both a Cost Estimate Validation Process (CEVP) and Value Engineering will be done on this project to validate the cost estimate, and the design approach. In 1997 an initial Value Engineering study was conducted on the 15-mile project corridor, and in March of 2002, a CEVP assessed the current cost estimate at the time. It is expected that a CEVP will be scheduled within the next year, followed by a VE study, both on the 5-mile funded project.

The GEC will work with WSDOT personnel to prepare, schedule, and execute these engineering studies.

### **Design Documentation**

The GEC / WSDOT Design Teams will work jointly to develop the design documentation package for this project. This package will include elements such as the project definition, environmental documentation, design matrix evaluation, cost estimate, and design variances and deviations. This Design Documentation package will be developed in accordance with the WSDOT Design Manual.

### **Plans, Specification, and Estimate Preparation**

The blended GEC/WSDOT project team will work jointly on developing a set of contract plans, specifications, and estimate for this project, for a projected ad date in 2010. The PS&E will be developed in accordance with the WSDOT Plans Preparation Manual.

### **Communication / Public Outreach**

The I-90 Communication Team (WSDOT / GEC) will work with the Communications Manager (WSDOT / GEC) to assist the project team in meeting the requirements for communicating project information, and exceeding the public’s expectations for accountability. This will include providing for the necessary assurance of good internal / external communications by developing, designing, and implementing a communications plan that outlines the strategies and tactics which will make the most efficient use of available resources.

### **General Agency Coordination**

The GEC will assist WSDOT with coordination of many groups, some of which include but are not limited to, FHWA, USFS, US Bureau of Reclamation, Wash. State Parks, Kittitas County, local, State, and Federal permitting agencies, utilities. The GEC may assist WSDOT in developing and acquiring memorandums of understanding and memorandums of agreements with utilities, local, and State agencies.



## **I-90 Snoqualmie Pass East – Hyak to Keechelus Dam - Delivery Principles**

- Strong owner role;
- Need to be flexible;
- Assign responsibility to where it is most effective;
- Provide for effective decision making; and
- Blended WSDOT / GEC project staff.

### **Delivery Strategies**

A critical function of the GEC will be to provide delivery strategies, technical expertise, and manpower resources, to supplement WSDOT staff, in the delivery of the required environmental permitting, and a complete PS&E for the “I-90 Snoqualmie Pass East – Hyak to Keechelus Dam” project. The GEC will also work with WSDOT to complete the environmental documentation (FEIS / ROD) for the unfunded portion of the “I-90 Snoqualmie Pass East” project, in addition to assisting in the development of phasing strategies for this portion of the project.

Development of strategies for the following elements is considered critical to the success of this project:

- Management and organization structure;
- Project control;
- Project implementation;
- Environmental documentation, mitigation plan development, permitting;
- Utilities, and right of way acquisition;
- Design Documentation;
- Contract Preparation (PS&E); and
- QC / QA.

### **Responsibility Matrix**

A project management team consisting of both WSDOT staff and GEC will be utilized. The Project Director (WSDOT) will be responsible for all aspects of the project, including both WSDOT and GEC resources and activities. A responsibility matrix will be required. This matrix will further define the roles and responsibilities between WSDOT and the GEC, as well as any on-call consultants required for the implementation of the project.

The development of the I-90 Snoqualmie Pass East – Hyak to Keechelus Dam Matrix will be a collaborative effort between the WSDOT and the GEC based on the (I-90 Snoqualmie Pass East – Hyak to Keechelus Dam delivery principles.

### **Work Priorities**

Individual tasks will be authorized using the following priority principles:

#### **Project Management Priorities**

- Develop management and organizational structure strategies to deliver the project; assemble the project team.
- Develop Scope, Schedule, Budget for I-90 Snoqualmie Pass East – Hyak to Keechelus Dam.
- Develop project control and delivery strategies to measure, monitor, and communicate project progress to assure accountability.

- Develop strategy to regularly monitor Scope, Schedule and Budget (weekly management team meetings)

#### **Project Development Priorities**

- Complete environmental documentation for I-90 Snoqualmie Pass East corridor.
- Complete PS&E for I-90 Snoqualmie Pass East – Hyak to Keechelus Dam.
- Complete permitting for I-90 Snoqualmie Pass East – Hyak to Keechelus Dam.

#### **Office Space and Co-location**

Due to the magnitude of this project, the staffing requirements, and the lack of WSDOT office space within the South Central Regional Headquarters (SCR HQ) complex, WSDOT will be asking the GEC to provide office space for a project office, within 15 minutes from the SCR HQ complex. This project office should accommodate WSDOT and GEC personnel (co-location) on the project team (approx. 40). Technical support groups (geotechnical, structural engineering, and hydraulics) are not expected to co-locate with the blended project team on a permanent basis.

Included within the GEC responsibility will be providing all office furniture and necessary workspace partitions for the office. Compatibility for setup of WSDOT Information Technology (IT) systems will be a requirement for the building holding the project office. The GEC will be required to work with WSDOT to develop an efficient and flexible IT environment for the project team. WSDOT IT staff will have input to the co-location facility selection to assure accommodation of required technology.

#### **KEY QUALIFICATIONS**

The GEC will need to demonstrate capacity and capability to perform project management, highway design, and environmental documentation, as well as providing qualified project support/specialty services personnel to supplement WSDOT forces.

To quickly respond to project needs, schedule requirements, and funding availability changes, the GEC must be able to readily provide staffing and resources in the following areas:

- Key Personnel;
- Technical staff to support an integrated WSDOT/GEC team;
- Transportation Design staff; and
- Environmental staff to support an integrated WSDOT / GEC team.

It is not necessary for the consultant to respond with all possible team members' expertise. It is important that the consultant respond to the following "core" areas of expertise that are critical components of the project:

- Project Management;
- Environmental Documentation & Permitting;
- Transportation Engineering (highway design);
- Geotechnical;
- Structural Engineering (Walls);
- Hydraulics;
- Avalanche Mitigation Design; and

- Major highway project constructability, construction and traffic control staging.

## **Key Personnel**

Qualified and committed personnel are key to the successful completion of the I-90 Snoqualmie Pass East – Hyak to Keechelus Dam project. The State holds the philosophy that it is the people who make the project successful; the organization can and will change. With this in mind, the State reserves the right to approve all full-time and key personnel individually for work on this contract. The GEC shall provide a core group with the appropriate mix of management, technical expertise, and experience. The Project Manager is expected to be 100% available to the project at contract execution. The key personnel will stay with the project until either the WSDOT and GEC mutually agree on replacement personnel, or the position is no longer needed.

The activities below are key delivery areas the GEC may supplement WSDOT staff. Within each of these areas, there will be many positions to staff. As the project develops, additional key personnel will be required. Support for each of the key personnel will need to be defined and provided as the project progresses and as budget allows. The GEC staff will be required, at a minimum, to show experience, expertise, innovation, and "not business as usual" skills in executive leadership and technical ability in the following areas:

1. Project Management  
Experience and expertise to lead and manage the delivery of the project.
2. Transportation Engineering  
Experience in highway engineering, hydraulics, geotechnical, and PS&E development.
3. Environmental Management  
Background to lead the completion of corridor NEPA documentation and permitting of funded portion of project. Desired ten years minimum transportation related background leading NEPA documentation and permitting of complex projects.
4. Business Management  
Experience in managing scheduling, reporting, document control, and budget management. Experience in managing multiple agreement types with consultants, utilities, and government agencies.
5. Communication / Public Relations Management  
Background to manage communication to a diverse audience from small entities to general public. Experience in developing communication plans and providing public outreach and media relations.
6. Environmental Documentation and Permitting  
Experience in the preparation of ESA Biological Assessments, Resource Discipline Reports, NEPA documentation including Environmental Impact Statements and decision documents. Experience in permitting of complex transportation projects and experience with the NEPA/SEPA/404 Merger Agreement.

## **Desired Expertise of Consultant Team**

- Project management for all phases of complex transportation projects;
- Developing transportation design-bid-build PS&Es;
- Organizational development (project management, planning, budget management, organization development, mobilizing the project team, locating the office space, coordinating equipment and services, human resources, identifying procurement methods and procedures, etc.);

- QA/QC and other project controls (scheduling, cost estimating, document control, general accounting, cost accounting, budgeting, etc.);
- Hydraulic engineering and design including preparation of hydraulic reports, development of stormwater treatment plans, and expertise with fish passage and WDFW stream simulation design;
- Structural engineering of wall systems with an emphasis on non-standard tied-back soldier pile walls and WSDOT standard wall systems;
- Geotechnical expertise with and emphasis on rock slope design, deep foundations, development of exploratory programs, and stability analysis;
- Experience and expertise in construction management and phasing, traffic control management. Experience in developing construction schedules, construction staging plans, and methods of work for complex construction projects;
- Understanding and application of NEPA/SEPA requirements and applicable permits;
- Certification in ESA or Wetland ID and delineation;
- Application, negotiation, and acquisition of federal, state, and local permits;
- Developing mitigation plans (conceptual to final) and developing atypical landscape/watershed scale mitigation plans;
- Communicating, involving, and coordinating with many different groups;
- Public works standards, methods, and procedures;
- Initiating interagency agreements [execution by WSDOT as owner];
- Understanding of sensitive local and regional issues, including coordination w/ USFS for highway easement acquisition;
- Understanding of gaining environmental approvals to proceed in an arena where the endangered species act is in effect; and
- WSDOT standards, methods, and procedures.

## **CONDITIONS OF THE AGREEMENT**

The State has not prepared a detailed scope of work to be performed under this contract. Individual tasks will be assigned using a negotiated hourly rates matrix. The State reserves the right to negotiate scopes of work for preliminary design work.

## **Selection Process**

Pursuant to state and federal regulations, a qualifications-based selection process will be used to evaluate and select the GEC. A submittal review team will review and score the experience and qualifications submitted to establish a ranked list of qualified consultants. Selections may be made from the written material supplied from this package. However, the state reserves the right to perform interviews if deemed necessary to select the most qualified team. If interviews are conducted, all qualified consultants would go into the interviews unranked and selection would be made solely on the interview.

## **Submittal Package**

The following information and criteria will be used to evaluate and rank responses:

1. Qualifications/expertise of firms on team (40 points);
2. Qualifications of proposed project manager (25 points);
3. Qualifications of proposed key managers (15 points);
4. Team's demonstrated ability to supplement agency workforce (40 points); and
5. Team's demonstrated ability and capacity to supply a co-located workforce (40 points.)

## **Criteria Definitions for (I-90 Snoqualmie Pass East – Hyak to Keechelus Dam General Engineering Services**

### **Scoring Criteria 1: Qualifications/Expertise of Firms on Team**

#### **Points – Minimum 0: Maximum 40**

- A) Provide a listing of all firms on your proposed team;
- B) Describe how the individual firms teaming together have worked together before. Provide the name of the project(s), each firm's role on the project, and the dates the services were performed;
- C) To quickly respond to project needs, schedule requirements, and funding availability, describe the team's ability to readily provide staffing and resources. Include a listing of each team member's offices and the number of employees within the state of Washington and nationwide;
- D) For each firm on your proposed team, provide the types of expertise necessary for this project that is available at each location, how long has each firm on your team provided these type(s) of expertise, and describe how these resources may quickly be made available. Provide an organization chart of your proposed team and include the respective roles that each firm will provide for the team; and
- E) Demonstrate using relevant project examples how your proposed team can provide the "Key Qualifications" as described in this notice to successfully deliver this project.

### **Scoring Criteria 2: Qualifications of Proposed Project Manager**

#### **Points – Minimum 0: Maximum 25**

- A) Demonstrate using relevant project examples how your proposed Project Manager meets the "Key Qualifications" as described in this notice to successfully lead and manage this project;
- B) Describe, using examples, how this proposed Project Manager has lead the development and implementation of project delivery strategies, organization and methods to deliver a major project;
- C) Provide the professional licenses/accreditations for the proposed Project Manager; include the year that the license/accreditation was received; and
- D) Provide the proposed Project Manager's availability to the project.

### **Scoring Criteria 3: Qualifications of Proposed Key Managers**

#### **Points – Minimum 0: Maximum 15**

- A) Demonstrate using project examples how your proposed Key Managers meet the "Key Qualifications" as described in this notice to successfully manage their responsible portions of this project;
- B) Provide the relevant professional licenses/accreditations for the proposed Key Managers; include the year that the license/accreditation was received;
- C) Technical, project, policy, and processes expertise relevant to this project to successfully function in positions;
- D) Ability to represent WSDOT; and
- E) The availability of Key Managers should be flexible to meet the needs of the project. It is anticipated that the Key Managers may work on the project part-time or full-time as position needs dictate. Describe your Proposed Key Managers' roles/responsibilities and availability to the project.

#### Scoring Criteria 4: Team's Demonstrated Ability to Supplement Agency Workforce

##### **Points – Minimum 0: Maximum 40**

- A) Demonstrate using project examples\* how the team has sufficient experienced staff to supplement agency workforce with technical support personnel; and
- B) Include technical, project, policy, and process expertise to create an integrated management team and to successfully function in positions typically filled by WSDOT staff. Expertise includes knowledge and coverage of all disciplines typical to State transportation design projects, with emphasis on desired expertise described in this notice. Demonstrate the ability to manage, review, and evaluate the work of others as an owner representative, including other consultants, as well as the ability to create original work products.

#### Scoring Criteria 5: Team's Demonstrated Ability and Capacity to Supply a Co-located Workforce

##### **Points – Minimum 0: Maximum 40**

- A) Demonstrate using project examples\* your co-located workforce's experience with complex projects;
- B) Demonstrate your team's capacity to provide supplemental workforce for the co-located project team; and
- C) Demonstrate the ability to manage, review, and evaluate the work of preliminary design on-call consultants as an owner representative.

When using project examples, please include the work/services provided on the project(s), dates of service on project(s), the approximate consultant fee for those services, approximate total cost for each project; contact name and phone number; and the name of the project manager on project(s). This information will be used for reference checks.

#### Interviews, if deemed necessary by WSDOT

A separate interview panel may be utilized to interview and select the successful consultant team. The State reserves the right to not conduct consultant interviews and to select the consultant solely upon the merits of the written submittals.

If interviews are conducted, the following "possible" schedule for the interview would consist of:

- Consultant Presentation – maximum 40 min.
- Interview Panel Questions – maximum 20 min.
- The Project Manager must lead the presentation before the interview panel. The consultant shall make available its Key Managers for questions and submittal package clarification.

#### **Consultant Selection Timeline**

- Announcement Date – November 29<sup>th</sup>, 2005
- RFQ information posted on Consultant Services Website – December 12<sup>th</sup>, 2005
- Pre-Submittal Meeting (attendance optional) – December 15<sup>th</sup>, 2005
- Consultant contact period with project staff for GEC – December 16<sup>th</sup>, 2005 through January 6<sup>th</sup>, 2006
- Submittal Package Deadline – January 12<sup>th</sup>, 2006 (4:00 PM)

- Consultants are contacted by GEC staff for submittal clarification question(s) – January 13<sup>th</sup>-January 18<sup>th</sup>, 2006
- If interviews are conducted, January 17<sup>th</sup> - January 18<sup>th</sup>, 2006
- Review Submittals by Project Teams and selections made – January 19<sup>th</sup>, 2006
- Notify Consultants – Week of January 22<sup>nd</sup>, 2006

### **Submittal Requirements**

Consultants that submit a package in response to this announcement must have the capability of providing the products and services listed in the advertisement. Sub-consultants may be used. WSDOT assumes no obligation of any kind for expenses incurred by any respondent to this solicitation. All submittals become the property of WSDOT and will not be returned. The submittal shall meet the following requirements, or it will be deemed non-responsive and will not be eligible for consideration of this project:

- Each criterion for selection must be addressed.
- Your submittal must be accompanied by the required Prime Submittal Information Packet Form and the Sub Submittal Information Packet Form. These forms must be completed in their entirety for the Prime and all sub-consultants or your submittal will be deemed non-responsive and will not be considered for this project. If you do not have access to the Internet, you may obtain a form by calling 360-705-7104. Information supplied by this packet will not count toward the total number of pages required for the submittal.
- There is a minimum twelve (12)-point font requirement for the basic text of the entire submittal. Any charts, graphs, table of organizations, etc., must be of readable size.
- The maximum number of sheets allowed per submittal will be thirty (30) sheets, submitted only on single sided, single column typed 8.5" x 11" paper. We will allow one (1) page of the 30 sheets to be submitted on paper other than 8.5" x 11" size. The page count limitation applies to ALL sheets contained in the submittal. The only exceptions to the page count are the front and back cover, and the Submittal Information Packet form.
- Federal Forms SF 254 and SF 255 are not required for this solicitation. If these forms are included in the submittal, they will count towards the maximum limitation of thirty (30) pages.
- Six (6) originals/copies of the submittals are due no later than 4:00 PM, January 12<sup>th</sup>, 2006, to the Director of Consultant Services, Washington State Department of Transportation, Consultant Services Office, 7345 Linderson Way SW, Tumwater, WA 98501-6504.
- Late submittals, or those delivered by facsimile, electronic mail, or any other format other than bound paper copies, will be deemed non-responsive and will not be considered for the project.
- Submittals that do not follow the directions will be deemed non-responsive and will not be considered for the project.

In the event, CAD graphical or design engineering electronic data is to be submitted, during agreement negotiations the State and the Consultant shall agree upon the software release to be used for the project.

The Professional capabilities of Consultants must include Professional Registration in the State of Washington and a demonstrable expertise in one or more of the disciplines necessary to

accomplish the services. In addition, the Consultant must be registered as a company licensed to perform "engineering services" in the State of Washington.

The department encourages disadvantaged, minority, and women-owned consultant firms to respond.

Questions regarding the project should be directed to Randy Giles P.E., 509-577-1812.

Questions regarding the solicitation and selection process should be directed to the Olympia Service Center Consultant Services Office, at 360-705-7147.

Persons with disabilities may request this information be prepared and supplied in alternate formats by calling collect 206-389-2839. Persons with hearing impairments may call 1-800-833-6388 (Washington State Telecommunications Relay Service) and ask for 206-515-3683.